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# CAMPGROUND RESERVATION SYSTEM

## AN ANALYSIS OF THE POTENTIAL FOR SPRUCES CAMPGROUND ON THE SALT LAKE RANGER DISTRICT

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## ABSTRACT

Spruces Campground is the largest campground on the Wasatch-Cache National Forest and is located adjacent to the heavily urbanized Wasatch Front. There are one million people living within one hour's drive of the campground. This paper examines and evaluates two campground user allocation systems and discusses the advantages and disadvantages of each system. The first-come first-served system, currently in use at Spruces, is discussed and the applicability of implementing a reservation system for individual family units is evaluated. The paper proposes making a change at Spruces Campground from first-come, first-served management to a reservation system on a trial basis.

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## I. Introduction

The Salt Lake Ranger District, Wasatch-Cache National Forest is located adjacent to the major population center of the State of Utah. The Wasatch Front, as the area is commonly referred to, is the home of 70% of the State's population.[1] This amounts to approximately 1,000,000 people who are within one hour's drive of the District's public lands.

The Wasatch-Cache National Forest is one of the Nation's most heavily used forests by recreationists. In 1980 and 1981, it was the most heavily used forest in the National Forest system with nearly 7,000,000 recreation visitor days use each year.[2] Of the six ranger districts comprising the forest, the Salt Lake Ranger District is the most heavily used by recreationists, accounting for approximately 35% of the total use each year.[3] The majority of this use occurs within an area immediately adjacent and to the east of Salt Lake City, known as the Tri-canyon Area. The Tri-canyon area contains about 138,000 acres of National Forest land and is easily accessible by paved roads into the three major canyons. The relationship of the Tri-canyon Area to the State's metropolitan area is illustrated in figure 1 on page 2.

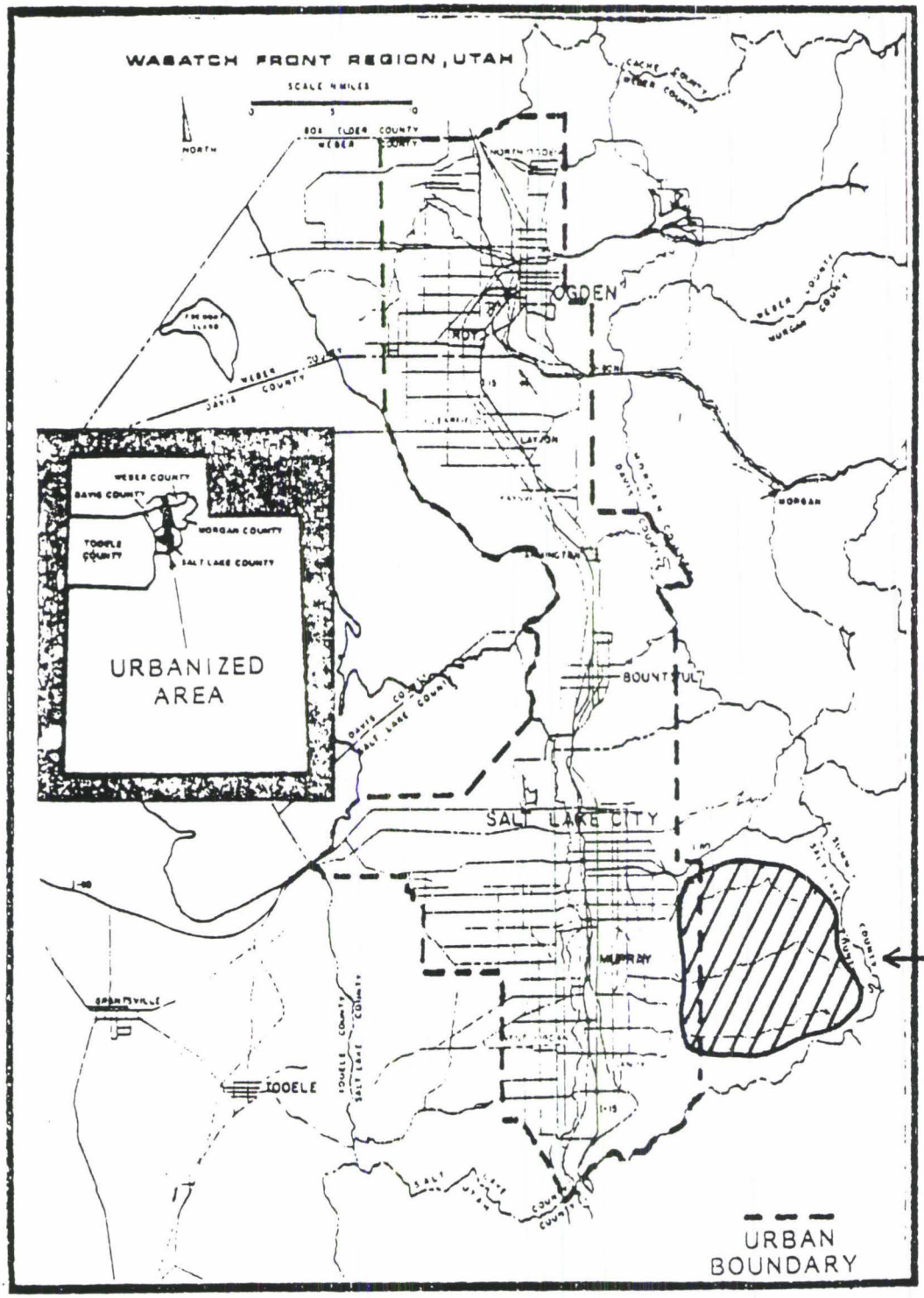
The three canyons comprising the Tri-canyon Area are Millcreek, Big Cottonwood, and Little Cottonwood Canyons. Each canyon has facilities

[1] Open Space/Recreation Needs in the Wasatch Front Region, Wasatch Front Regional Council, January 1981.

[2] Intermountain Region Fact Sheet, January 1981, p. 9.

[3] Recreation Use Information, Adminstrative Unit Summary, Wasatch-Cache National Forest, Salt Lake Ranger District, 1981.

FIGURE 1


WASATCH FRONT REGION, UTAH
SCALE MILES
NORTH
OGDEN
LAYTON
BOUNTIFUL
SALT LAKE CITY
MURRAY
TOOELE
WEBER COUNTY
DAVIS COUNTY
SALT LAKE COUNTY
TOOELE COUNTY
MORGAN COUNTY
URBANIZED AREA
URBAN BOUNDARY
TRI-CANYON AREA

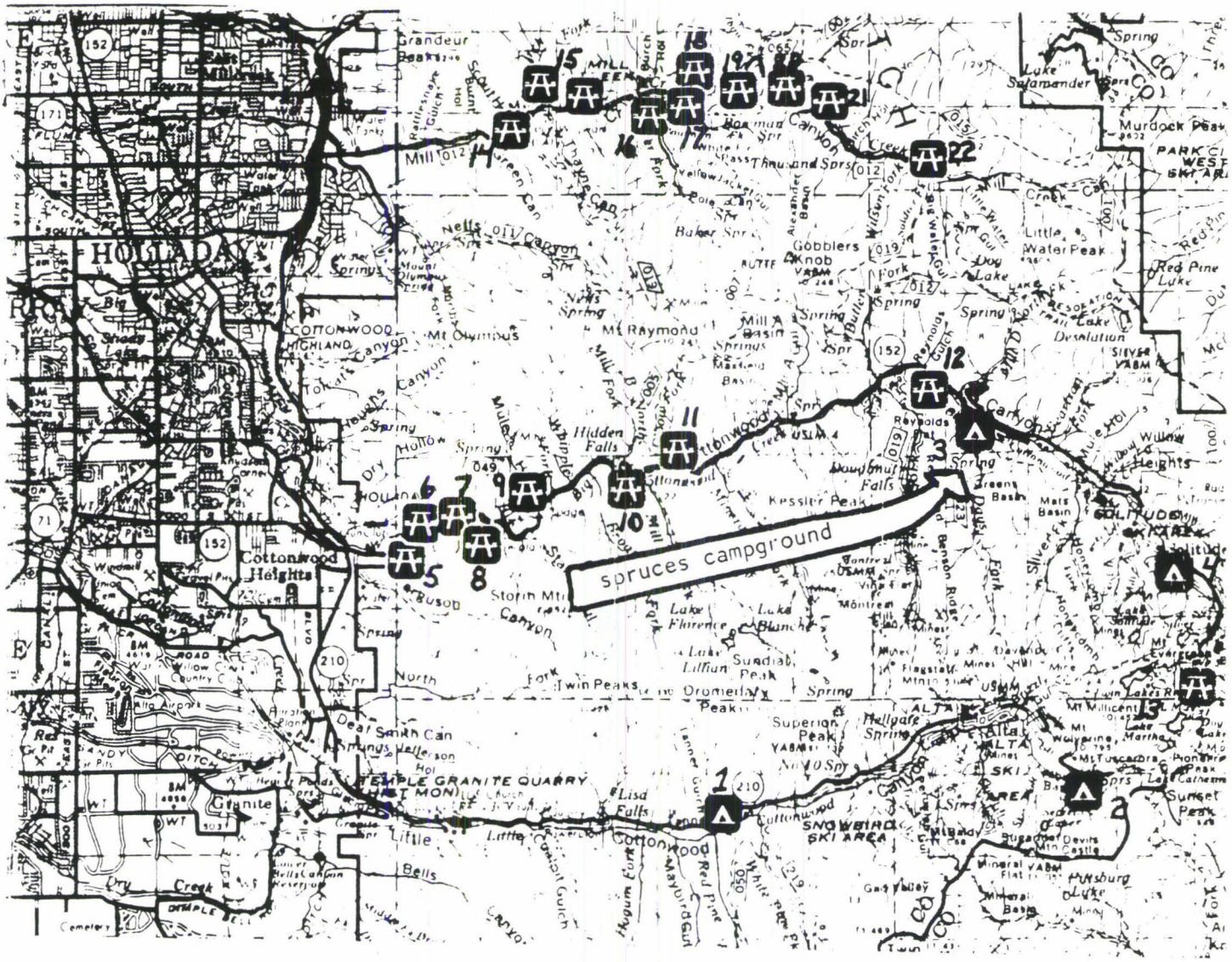
developed for recreational activities, including picnic areas, campgrounds, trailheads, and ski areas in Little and Big Cottonwood canyons. Some of the most popular summer activities occurring within the canyons are single family and group camping and picnicking in developed sites. There are four campgrounds within the Tri-canyon Area with a PAOT (people at one time) capacity of 1,490 and 18 picnic areas with a PAOT of 2,995 persons.[4] The locations of campgrounds and picnic areas in the Tri-canyon Area can be seen on the area map, figure 2, page 4.

Picnicking and camping in the Tri-canyon Area have been important recreational pastimes of the people in Salt Lake and surrounding communities for many years.[5] Most of the camping and picnicking facilities were developed around the 1940's and some have since undergone varying degrees of rehabilitation. The majority of the facilities are located in canyon bottoms within 50 feet of live streams. There are very few areas which are suitable for new development to accommodate future demand.

Very few of the existing facilities were designed and constructed to accommodate the intense use they are now receiving. The more popular areas are characterized by overcrowding during weekends and holidays, vegetation and soil loss, and law enforcement problems such as vandalism and boisterous behavior.

[4] RIM Basic Address Record for Established Developed and Dispersed Areas, February 1, 1981.

[5] Salt Lake Planning Unit Land Management Plan, U. S. Department of Agriculture, Forest Service Intermountain Region, p. 55.




Tri-canyon Area Developed Sites

Campgrounds

| | | | |
|---|---|---|---|
| *1 | Tanners Flat | 3 | Spruces |
| 2 | Albion Basin | 4 | Redman |

Picnic Areas

| | | | |
|---|---|---|---|
| 5 | Oakridge | 14 | Church Fork |
| 6 | Dogwood | 15 | Box Elder |
| 7 | Ledgemere | 16 | Terraces |
| 8 | Birches | 17 | Maple Grove |
| 9 | Storm Mountain | 18 | Maple Cove |
| 10 | Mill B | 19 | Evergreen |
| 11 | Moss Ledge | 20 | Fir Crest |
| 12 | Jordan Pines | 21 | Clover Springs |
| 13 | Brighton | 22 | Big Water |

* Number indicated corresponds to number on map.

This study will focus attention upon Spruces Campground located in Big Cottonwood Canyon. Spruces has recently undergone a partial reconstruction and is scheduled for completion of the remaining reconstruction in 1982. When complete, the campground will provide modern camping and picnicking facilities for 1,285 people when operating at its capacity. The design capacity of most individual family units within the campground is five persons. Use of the facilities by groups larger than the design capacity results in soil compaction and loss through erosion and vegetative loss.

Spruces has long been a favorite retreat for local recreationists seeking climatic relief in the cool mountain canyons during the hot summer days. Many of the users of Spruces are individuals and families who use the facility several times during the season.[6] There was a great deal of local interest in the rehabilitation project and a high level of anticipation of the campground's reopening.

During the summer of 1981, a portion of the campground was opened for public use. The result of the opening was as expected; capacity utilization on weekends and holidays, with many potential users turned away due to full conditions. The potential users seeking space in Spruces were forced to seek space in another campground or change their plans for the weekend.

[6]Recreation Information Document 2300-1Z1 (CPO), Origin of National Forest Visitors to Individual Sites According to Airline Distances, RIM Center, December 3, 1981.

This study will analyze the potential for implementing a reservation system for the Spruces Campground, as opposed to the first-come, first-served management system now employed, and based upon findings, reccommend a change to be implemented on a trial basis.

## 1.1 Statement of Purpose

The purpose of this paper is to investigate campsite allocation methods in two campground management systems; 1) first-come, first-served and 2) reservation. The two systems will be anlayzed and the opportunities and constraints of each system compared.

Specific items that are investigated in each allocation system are:

1) User satisfaction.
2) Site deterioration through overuse by large groups.
3) Effectiveness of fee systems.
4) Competition for campsites between picnickers and campers.

## 1.2 Definitions

The following terms are defined as used in this study:

Recreation Visitor Day - Twelve visitor hours, which may be aggregated continuously, intermittently or simultaneously by one or more persons.

Use Fee - A fee charged for use of specialized sites, facilities, equipment, or services furnished at Federal expense.

PAOT - People at one time capacity of a site developed for recreation purposes.

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PAOT - People at one time capacity of a site developed for recreation purposes.

User - An individual who enters upon Federal land for the purpose of participating in an activity.

1.3 Limitations

The concept of reserving campground space for an individual family in Federally owned and operated campgrounds is relatively new. From an inauspicious beginning in 1973, the program has evolved into an effective management alternative for some resource managers.[7] There is not, however, a significant amount of documented research dealing with the program's evolution process. Some of the ideas presented in this study are the product of opinions expressed by various Park Service and Forest Service personnel and lack scientific verification. Time did not allow the author an opportunity to gather more detailed data upon which the conclusions and recommendations could have been tested.

[7]Arthur W. Magil, Campsite Reservation Systems . . . The Campers Viewpoint, U. S. Department of Agriculture, Forest Service Research Paper PSW-121, 1976.

## II. Present and Future Recreation Projections

In the feasibility analysis of a reservation system for Spruces Campground, the impacts of present and future recreation projections must be considered. In this chapter the population, income, leisure time, energy, participation, and recreation resource rationing are examined; and their pertinence to the study set forth.

### II.1 Population

The population of the United States has increased at a dramatic rate the past few years. Between 1970 and 1980 the population of our Nation increased 10.6 percent. It is estimated that about 220 million people now live in America, and the population increase is expected to continue.[1] The present and expected population will place even greater demands upon our natural resources as higher wages and more leisure time make recreation opportunities more available.

The demand for outdoor recreation in the State of Utah has grown at a much faster rate than planners had anticipated. The increased demand for recreation opportunities in Utah is, in part, the by-product of a rapidly growing population. Between 1970 and 1980 the population of Utah increased 37.9 percent making it one of the five fastest growing states in the Nation.[2]

The rapid increase in population is largely due to the extensive development of energy resources, industrial growth, and a high birth

[1] Intermountain Region Recreation 1983 - 1992, September, 1981. U. S. Forest Service, Ogden, Utah, p. 3.

[2] Ibid., p. 3.

rate. The development of the proposed MX Missile system in southern and western Utah would place an even greater strain upon our outdoor recreation resources and cause at least a significant short-term increase in population growth. The current population trend in Utah is expected to continue for at least the next 20 years.[3] (See Table 1.)

Table #1 - Population by County, Utah Projections

| | 1950 | 1960 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 |
|---|---|---|---|---|---|---|---|---|---|
| Davis | 30867 | 64760 | 99028 | 115000 | 146540 | 205000 | 245000 | 272000 | 297000 |
| Morgan | 2519 | 2837 | 3983 | 4700 | 4917 | 7200 | 8500 | 10000 | 11000 |
| Weber | 83319 | 110744 | 126278 | 136000 | 144616 | 190000 | 210000 | 228000 | 238000 |
| Salt Lake | 274895 | 383035 | 458607 | 508000 | 619066 | 698000 | 772000 | 834000 | 900000 |

Source: U. S. Bureau of Census, Census of Population

11.2 Income

Closely paralleling population growth as an indicator of recreation use is income. The per capita income of the State of Utah is low compared to the national average. This is mostly due to the high number of people in the population less than 16 years of age and not in the job market. On the other hand, the average gross income for families within the State is projected to be over $28,000 for 1982 and is considered relatively high by national compar-

[3] Intermountain Regional Recreation 1983 - 1992, September, 1981, U. S. Forest Service, Ogden, Utah, p. 2.

ison.[4] The high average gross income, together with a low unemployment rate of 6%, provides most Utah families with discretionary income for amenities such as outdoor recreation.[5]

II.3 Leisure Time

Many people define recreation and leisure in the same terms. However, leisure may be defined as the absence of work, or activities necessary to sustain life. Recreation, on the other hand, is part of leisure--that portion in which an individual consciously pursues recreational activities.[6] Some sociologists and psychologists believe that as man becomes more of an urban being, the need for outdoor recreation and, in particular, recreation in a natural setting, will greatly increase.[7]

As the urbanization spreads along the Wasatch Front and the population continues its rapid increase, the demand for quality recreational opportunities will also increase. The role of leisure in the life of Utahns, the predominant users of recreation facilities along the Front, will become an increasingly more important aspect of their physical and mental health.

[4]Telephone conversation with Doug McDonald, Utah State Tax Commission, January 27, 1982.

[5]Telephone conversation with Utah Job Service, January 27, 1982.

[6]Donald E. Eckerman, The Effects of Reservation Systems, Income, and Season of Use of California Campgrounds, Ann Arbor, MI University Microfilms International, 1977, p. 1.

[7]Hendee, J.D., "Rural-Urban Differences Reflected in Outdoor Recreation Participation" Journal of Leisure Research, Vol. 1., No. 4, (autumn 1969)

The role of leisure in society has been studied extensively. Researchers are in near total agreement that the amount of leisure time available will continue to increase. Among the factors contributing to the increase are work time reductions from an average 70-hour work week in 1850 to 35 hours in the 1970's.[8] Other developments such as the paid vacation, three-day weekend, and the 40-hour, two or three-day work week have had an influence. Today more than ever, Americans are recognizing their leisure, particularly the healthful outdoor forms of leisure, as a necessity to cope with the high pace of American life.[9]

II.4 Energy

The role of outdoor recreation in American life and level of participation in recreational activities has experienced change due to fluctuating availability and price of gasoline and other fuels. Americans are very dependent upon the automobile to pursue their leisure and outdoor recreational activities. In the State of Utah and on the Wasatch-Cache National Forest, driving for pleasure is the number one outdoor recreation activity. Other popular outdoor recreation activities such as hiking, camping and picnicking require the use of the automobile to

[8]John D. Hunt, A Look at Tomorrows Recreation and Leisure Today, Institute for the Study of Outdoor Recreation and Tourism, Utah State University, Logan, UT, 1973, p. 5.

[9]Economic Analysis of the American Campground Industry 1979 and Occupancy Date 1980, The National Campground Owners Association 1981, p. 12.

support the activity. The dependence upon the automobile for outdoor recreation, could cause recreationists to alter their participation frequency.

In 1979, a study was conducted to assess the impacts of the availability and cost of gasoline in the tourist dependent Intermountain Region. The study questioned respondents on their attitudes and perceptions of gasoline availability, gasoline reservation programs, gasoline rationing and travel strategies, and gasoline prices and mode of travel. The findings of the study suggest some short and longrun implications for tourism travel. In the short run:

a) The rapid escalation of gasoline prices will dramatically curtail travel on trips greater than 500 miles in length.

b) Rationing in conjunction with increased gasoline prices will intensify the severity of travel reductions.

c) Restricting or eliminating the availability of gasoline on weekends will also increase the intensity of travel cutbacks. In the long run people will:

a) Become more accustomed to higher gasoline prices, assume that fuel is available and continue to travel by automobile on a more strategically planned basis.

b) Travel less frequently.

c) Travel to destinations either closer to home or closer to mass transit centers.

d) Stay longer at a single destination rather than frequenting several destinations on one trip.

e) Abandon the auto as the primary mode of vacation travel for trips over 500 miles in length in favor of mass transit or a combination of mass transit and auto.[10] The study findings can be applied to the Wasatch Front area. Fuel costs and availability will influence the kinds and amount of travel that Front residents participate in. The demand for close to home outdoor recreation sites, such as Spruces Campground will likely increase.

II.5 Outdoor Recreation Participation

The extraordinary growth of outdoor recreation in the past few years is attributable to population and income growth, increased leisure time and increasing urbanization. The individual outdoor recreation activities participated in are numerous and varied.

Traditionally, one of America's favorite pastimes has been camping. A 1978 camping survey identified 17.5 million active camping households, or about 50 million campers.[11] Despite changes in the quantity and quality of available camping opportunities, the ways in which Americans perceive camping as an outdoor activity seem surprisingly resitant to

[10]James F. Burke and Peter W. Williams, Gasoline Prices and Availability: What Do They Mean for Tourism? Utah Tourism and Recreation Review, Vol. 8, No. 3, July 1979, p. 7.

[11]Wilbur F. Lepage and Gerald L. Cole, 1978 National Camping Market Survey, Forest Service Research Paper N.E-450, 1979, p. I.

change. Camping may no longer be "roughing it", but it is more popular today than ever.[12]

Regional trends in camping indicate that the northeastern and western portions of the country have experienced an increase in the number of active campers, while other regions have shown a decline. A 1978 outdoor recreation participation study for the State of Utah indicated that camping is the third most popular recreation activity in the State.[13] The high ranking of camping among Utahns is due mostly to the availability of camping facilities and the local family oriented culture.

The use of National Forest developed sites also attests to the popularity of camping in Utah. The Wasatch-Cache National Forest, one of six National Forests in Utah, received over 2.5 million developed site recreation visitor days use in 1981. Of this total, 1.7 million visitor days were spent camping. This figure represents about a 6.5% per year increase over the last five years.[14]

[12]Wilbur F. Lepage and Gerald L. Cole, 1978 National Camping Market Survey, Forest Service Research Paper N.E-450, 1979, p. 13.

[13]Utah Resident Outdoor Recreation Participation, Institude for the Study of Outdoor Recreation and Tourism, Utah State University, Logan, UT., January 1978, p. 16.

14RecreationUse Information, Administration Unit Summary, Wasatch-Cache National Forest, 1981.

## II.6 Rationing Recreation Resources

On any given day in America you can read in a newspaper, watch on television, or listen to a radio and learn of a shortage of some goods or services in our society. Oil, toilet paper, and sugar have all been the objects of short supply and panic buying. Not all shortages are publicized in the headlines however, and not all shortages can be bought and stored in quantity for later use.

Some National Parks and National Forests have felt it necessary to establish a reservation system to allocate camping units. To hike in Grand Canyon you need a permit, and to hunt elk in some western states you must have your name drawn through a lottery system. These examples of recreation rationing are in response to demand exceeding supply.

Recreation professionals in the Forest Service are inventorying recreation resources in an effort to determine the maximum number of recrea tionists an area can accommodate before the site and the users enjoyment degenerate. This number, the carrying capacity, is equivalent to the supply of recreation opportunities. Given the projected population and outdoor recreation use increases along the Wasatch Front, more recreation resources will be in short supply in the future.

The purpose of rationing is to equalize demand and supply. To equalize, production can be increased to meet demand, or society can choose which wants and needs it will fill with the available production. So long as resources are sufficient, increased production is preferred; but when resources are limited, the ability to increase production is

limited and rationing may be used to determine who will be the consumer. There are four basic methods of rationing: rationing through pricing, rationing by queuing, rationing by reservation, and rationing by lottery.[15]

The changing economic and social factors discussed in this chapter will play an increasingly more important part in how, when, and where Utah residents participate in outdoor recreation activities. As the demand for available outdoor recreation resources increases, the competition for the use of the resources such as campsites, will also increase. This demand may force resource managers to implement a method of allocating campsites that reduce onsite competition and overcrowding.

[15]John Baden and William Becker, Recreation-Is There Rationing in Its Future?, Utah Tourism and Recreation Review, Vol. 4., No. 2, April 1975.

# III. Campground Management Systems

This chapter analyzes two methods of allocating campsites within a campground. The first-come, firstserved method, currently in use on the Salt Lake Ranger District, and the reservation management method. The components of each system, which are pertinent to the study, were identified and analyzed, and the advantages and disadvantages of the two systems discussed.

## III.1 First-come, First-served System

This system is the predominant Campground Management System in use in the Forest Service today. The campsite allocation method operates on a very simple premise--those arriving at the campground early are normally assured of securing a site. (For the purpose of this study, "early" is considered to be one or two days prior to high demand periods such as weekends or holidays.) The earlier the user arrives at the campground the better individual camping site selection opportunity will be available. Under the first-come, first-served management, the competition for securing a site can become very intense.

### III.1.1 Site Availability

There appears to be at least two different approaches to the planning of a camping outing in a first-come, first-served managed campground. One is the spur of the moment approach in which the group or family spontaneously decides on a weekend of camping in the mountains. This group runs a moderate to high risk of finding a full campground upon arrival. The other approach is the well planned outing, often by groups familiar with the campground and the use allocation. This group

of users has a distinct advantage over the spontaneous user and will go to great lengths to secure their favorite site.

The campers involved in the well planned outing often create problems for the campground manager. Often the group consists of more than one family and requires more than one site for accommodation. A few members of the group can arrive early (often several days) and effectively reserve the sites selected for the group's outing. Often the methods of site reservation do not include physically occupying the site during the first 24 hours, which is a violation of Forest Service regulations. This is not only unfair to other campers seeking sites but puts an added burden on campground law enforcement personnel.

III.1.2 User Fees

The fee system for Forest Service developed recreation sites can be one of three general types: (1) Admission fees, (2) Recreation use fees, and (3) Recreation permit fees.[1] For the purpose of this study, daily recreation use fees are applicable. Recreation use fees are payable on a daily basis for the use of sites, facilities, equipment, or services.

The four fee campgrounds on the Salt Lake Ranger District are administered under a first-come, first-served management system, with a daily recreation fee assessed for the use of the site. The fee system is designed and encouraged to be on a voluntary pay basis.

1Forest Service Manual, Title 2300, Recreation Management 2331.2 - Fee System, February, 1976, Amendment 71.

Users are advised through signing of the fee requirements for the campground and are expected to comply on a voluntary basis. Campers are normally given one-half to one hour upon entering the campground to select a site, return to the pay station and comply with the fee requirements. Total voluntary compliance to the fee requirement occurs about 50% of the time.[2] The other 50% must be contacted personally by recreation guards and reminded of the fee requirements and urged to comply. Failure by the user to pay the fee can result in a Notice of Violation being issued.

A significant concern with the payment of an on-site daily fee is the large amount of cash that accumulates on the site. With recent Forest Service direction to adjust use fees to be more competitive with the private sector and to recover more of the cost of providing the recreation service, the amounts of cash on hand become even more significant.[3] The health and safety of employees, as well as the security of large amounts of money, are becoming important concerns under this form of management.

III.2 Reservation System

The concept of reserving individual campsite space in advance is relatively new. Beginning with a pilot program in 1973, in

[2]Conversation with Gene Lowin, Salt Lake Ranger District Forestry Technician, January 27, 1981.

[3]Forest Service Manual, Title 2330, Recreation Management, Interim Directive No. 25, October 1, 1981.

which two reservation systems were tested in two National Forests and six National Parks, the system has expanded to where it is in use in eight National Forests and seven National Parks.

The development of a campground reservation system was in response to a need. As visitation at outdoor recreation sites increased, many of the sites were becoming overcrowded subject to site deterioration and less likely to provide quality recreational experiences. The reservation concept was seen as a means of rationing use and protecting the site through a more positively controlled management system.

The reservation allocation method is employed primarily in sites with a history of overuse and where current demand for campsite space exceeds supply. The majority of the sites are near major population centers or are nationally known destination attractions.

The main components of a reservation system do not differ significantly from the first-come, first-served system. In both systems the campsite must be secured and a fee paid for the use, prior to enjoying the experience.

### III.2.1 Site Availability

One of the most significant differences between the two campground systems being studied is the method of obtaining a campsite. The first-come, first-served system does not guarantee a site, but for those capable of an early arrival a site is usually guaranteed; and it is the site the campers prefer. Campers using a reservation system are willing to sacrifice the site of their choice for the security of knowing they have a site upon arrival.

The reservation system administered by the Park Service and Forest Service is currently handled by one contractor, Ticketron, Inc. of San Francisco. Campers can reserve a campsite up to eight weeks in advance by visiting one of many Ticketron outlets or by mail request. The information is relayed to the managing agency in one of two ways. Several large highly used National Parks such as Yosemite National Park have computer terminals on site which provide the campground management with the most current reservation data.[4] Smaller National Parks and Forest Service campgrounds receive a weekly computer printout of reservations. Both the Park Service and Forest Service make all unreserved family campground sites available on a first-come, first-served basis.

Site selection through a reservation system favors the campers who are capable of planning their trip in advance. However, many people can plan vacations in advance--more than three-quarters of all campers can plan more than two weeks and a third can plan more than 12 weeks.[5] Many campers, even though capable of planning their trips in advance, resent the regulated nature of a reservation system or prefer the flexibility of the first-come, first-served system. However, as competition for campsites increases, campers may have to change their attitudes and preferences if they plan to continue using campgrounds.

4Telephone conversation with Al Vital, National Park Service, Washington D.C., January 15, 1982.

[5]Arthur W. Magill, Campsite Reservation Systems---The Campers Viewpoint, U. S. Department of Agriculture, Forest Service Research Paper PSW-121, 1976, p. 8&9

III.2.2 Fee System

The fee system for reservation camping involves the payment of a daily recreation use fee plus a service fee to the reservation company. The current Ticketron reservation fee is $1.75 for family campsites and $3.00 for group sites. In the event of cancellation, the reservation fee is not refundable.[6]

The payment of fees directly to the reservation company reduces the time and expense involved with fee collection at the site. It also reduces the amount of total camping receipts on site to those collected from first-come, first-served campers.

III.3 Advantages and Disadvantages of the Systems

The reservation system of user allocation offers advantages in site protection, reduction of crowding, and greater control over incidents of unlawful behavior. By adhering to strict site capacities for each individual campsite, the campground manager can better control the number of people using the site, thereby reducing vegetation loss and soil compaction, and minimizing overcrowding. This would best be accomplished by placing a fee station at the campground entrance, occupied by an attendant 24-hours a day. The attendant would have a high degree of control over all persons entering the campground, greatly reducing the number of visitors lacking a legitimate reason for being there.

The first-come, first-served system could also benefit from a 24-hour a day attendant. To be most effective, however, individual sites

[6] Campground Reservations, National Forest in California, 1980.

would have to be assigned, matching group size with site capacity. This being the case, the campground manager may as well go one step further and implement a reservation system.

Public safety is another consideration that may favor the implementation of a reservation system at Spruces. Under present management, a "campground full" sign is placed at the entrance when all sites are taken. This does not stop potential campers from "cruising" through just to make sure. A sign reading "campground full - all sites reserved" may imply a more definitive message to the potential user and reduce the volume of unnecessary traffic through the campground.

Although reservation systems offer advantages in greater site protection, reduction of crowding and public safety, there are also some disadvantages. Historically, the Forest Service and Park Service have told the public that the forests and parks are theirs to enjoy. They have used slogans such as, "The National Forests---America's Playground", or "As citizens of the United States you are a part owner of Yosemite Valley". Some visitors may doubt the "public" nature of the forests and parks when faced with reservation requirements, user fees, and the necessity of dealing with a commercial reservation company rather than the ranger. Reservation systems may be very oppressive to people who like to roam, free of time schedules.[7] Reservation systems may place other

[7]Arthur W. Magill, Campsite Reservation Systems---The Campers Viewpoint, U. S. Department of Agriculture, Forest Service Research Paper SPW-121, 1976, p. 3.

groups at a competitive disadvantage--those who are unable to schedule their vacations well in advance and those who live in a community not served by a reservation office.

## IV. Opportunity or Need for Change in Spruces Campground Management System

This chapter studies the expected outdoor recreation trends and participation as it relates to management strategies in Spruces Campground. It also addresses how a reservation system would satisfy management's needs as opposed to the present system.

A more detailed description of Spruces Campground may be needed to help the reader understand the relevance of the material in this chapter. Spruces is the largest campground on the Wasatch-Cache National Forest. Upon completion in 1982, it will have available for public use 95 individual and multiple family camping units. In addition to the family camping units are nine areas designed for group camping and picnicking use. The size of the group units range from a capacity of 45 PAOT to 180 PAOT, giving the campground a total capacity of 1,285 PAOT. Recreation activity facilities such as volleyball courts, horseshoe pits and ballfields are also being constructed within the area.

The group facilities are presently managed under a reservation only system with a lottery held at the beginning of the reservation period. After the lottery is conducted, available space is reserved on a first-come, first-served basis.

The campground was totally closed during 1979 and 1980 for reconstruction. From 1975 through 1978, selected areas within the campground were closed due to deteriorated or unsafe facilities. In 1981, a portion of the campground was opened for public use with all new facilities.

The occupancy rate for a two-month period, July and August, was 89% on weekends and 45% on weekdays.[1]

IV.1 Expected Camping Participation

With current population and economic trends in Utah, it can be concluded that campground use on the Salt Lake District will continue to increase at its present rate. The percentage increase in camping in 1981 over 1980 was approximately 6%, which was similar to the increase forest-wide.[2] The availability and price of fuel will continue to force more and more recreationists to seek recreation opportunities closer to home. This will certainly increase the demand for additional recreation facilities as the current supply is equalized by demand.

For the Tri-canyon Area of the Salt Lake Ranger District, the demand for additional developed recreational facilities cannot be satisfied. Existing campgrounds and picnic areas can be rehabilitated, but the opportunity for new facilities is minimal. The sites will have to withstand the increased pressure they receive, and management will have to be responsive to the needs of the user as well as protecting the site.

[1]Recreation Use Information, Wasatch-Cache National Forest, Salt Lake Ranger District, 1981.

[2]Conversation with Frank Grover, Wasatch-Cache National Forest Recreation Specialist, February 4, 1982.

IV.2 Applicability and Implementation of a Reservation System at Spruces

The rehabilitation of Spruces Campground has offered resource managers on the Salt Lake District an opportunity to evaluate current management with regard to providing a quality recreation experience and preserving site quality. Most users of the area during the 1981 camping season expressed a high degree of satisfaction with the new facilities and the quality of their experience.[3] However, one area of discontent with users and the campground managers was the use of the cam sites for picnicking. Picnickers felt they should be able to enjoy the new facilities but not be required to pay the daily use fee.

Not only was enforcement of the fee regulations difficult and time consuming for the recreation guards, but the sites occupied by picnickers were not available for the camping public. Under reservation system management, this problem may be lessened through public education of the reservation requirements.

Vandalism and law enforcement situations are persistent problems in developed recreation sites on the Salt Lake Ranger District. Some of the vandalism occurs during the off season but a significant amount occurs during periods when campground personnel are off duty. Both Park Service and Forest Service officials indicated that the implementation of reservation systems had reduced vandalism and the incidence

[3]Conservation with Jeff Larsen, Spruces Recreation Guard, February 4, 1982.

of unlawful behavior in their campgrounds. The reasoning for the reduction is that management has tighter controls over who gains access to the campground plus users with reservations know the campground manager has positive identification and their assigned site.[4]

Among other factors lending applicability of Spruces to reservation system management is the campground's close proximity to the Salt Lake City urban area. Past use of Salt Lake Ranger District Campgrounds indicate that a high percentage of users are local and probably repeat users. During the 1981 season, 76% of the users of Spruces Campground lived within 50 miles of the site.[5] This figure attests to the popularity of Spruces with local residents familiar with the site and would indicate that many users camp there several times each season. As population and outdoor recreation use increase, the repeat user may find it increasingly difficult to obtain a campsite than in the past. This, in effect, could create a demand for a reservation system to assure those users of being able to continue their camping traditions.

The implementation of a reservation system for Spruces Campground is available through a private Salt Lake City reservation company.

[4]Telephone conversations with Al Vital, National Park Service, January 5, 1982, and Jack Williams, U. S. Forest Service, January 5, 1982.

[5]Recreation Information Document 2300121 (cpo), Origin of National Forest Visitors to Individual Sites According to Airline Distances, RIM Center, December 3, 1981.

The company currently serves organizations and businesses in the area for ticketing special events such as concerts and sports events. The company, DATATIX, currently offers campground reservation services in other states.

DATATIX of Salt Lake City is interested in providing a campground reservation service for the Wasatch Front area.[6] The service provided by the company would include:

a) Advertisement of the available service and location of ticket outlets.

b) Detailed explanation of the service provided, i.e., type of site available, capacity, restrictions.

c) Collection of fees for the campground use including a nominal fee to pay for the reservation service.

d) Timely conveyance of accurate reservation listings to the campground manager.

The service provided by DATATIX would satisfy the criteria necessary to implement and test the proposed reservation system.

IV.3 Effects of implementing a reservation system

The effects of implementation of the proposal are primarily positive. There are possible negative effects that could occur when private individuals (ticketing agents) attempt to explain and interpret Forest Service campground management policies. Forseeable problem areas include:

[6]Conversation with Sam Russo, DATATIX Area Manager.

a) The potential lack of a positive "HOST" attitude during the reservation transaction.

b) Ticketing personnel would probably lack familiarity with the campground and would be unable to answer site specific questions relating to its facilities and operation.

c) Ticketing personnel would not be able to answer questions relating to other activities and amenities available in the immediate area.

The potential for these and other problems exist. The successful implementation of the system would require close coordination, and intensive training of DATATIX personnel. The change from a system operated under complete Forest Service control, to a system operated in part by a private enterprise, would require the Forest Service to tolerate a variance in some of the traditional concepts and values indicated above. The campground manager, recognizing the potential for these variances, could resolve the problems created or at least explain the reasons for them when dealing with reservation guests.

## V. Summary and Conclusions

This study has analyzed alternate campground management systems and discussed the applicability of implementing a reservation management system at Spruces Campground. Factors affecting present and future recreation participation including population growth, energy shortages, resource rationing, income and campground management strategies were also analyzed. This chapter will summarize the findings of the study, establish conclusions based on the findings and make recommendations related to the findings of the study.

### V.1 Summary

The population of the State of Utah will continue to increase, especially along the urbanized Wasatch Front. The population increase and probable shortage and higher costs of fuel will increase recreation use in the Salt Lake Ranger District's campgrounds. An increase in individual leisure time and discretionary income will also add to the increase in recreation use.

The demand for outdoor recreation facilities will exceed supply as a result of increased use. To equalize the demand and supply, a form of recreation resource rationing is likely if a high degree of visitor experience level is to be maintained and if site quality is to be preserved.

The existing first-come, first-served system is a viable management alternative for most Forest Service campgrounds. At Spruces campground it presents the following shortcomings:

a) On high demand weekends (July 4th through Labor Day) 15 to 25 families are turned away due to full conditions.

b) Management does not have the degree of control necessary to regulate group size and resultant resource degradation.

c) There is no way to match vehicle type with the physical limitations of the individual sites.

d) Vandalism and rowdy behavior are a management concern due to unrestricted access to the area.

The first-come, first-served and reservation campground management systems have basic philosophical differences but each have applicability and merit under certain conditions. The reservation system favors the campers who have the ability to plan their trips well in advance and who want to be assured of a campsite upon arrival. The first-come, first-served management system favors the user who cannot or prefers not to plan trips in advance, who resists additional government regulation, and who values the freedom of spontaneous outings.

Spruces Campground offers a potential for management under a reservation system. Such a system has applicability due to the resource manager's desire to protect and preserve the facilities and site quality. The large percentage of local users and the proximity of Spruces to the urban center add significance to the need for an alternate management system in the future.

## V.2 Conclusions

Based upon the findings and within the limitations of the study, the following conclusions are presented:

1) Both campground management systems provide user satisfaction to those preferring the individual system.

2) Overcrowding and site deterioration are less likely in a campground managed under a reservation system.

3) Campgrounds near areas of rapid urban growth, increasing recreation participation, and a static recreation facility supply, have applicability for management under a reservation system.

V.3 Recommendations

The findings of the study are not conclusive proof that one management system can resolve all problems associated with operating a public campground. There are similarities in the opportunities and problems of campground management along the Wasatch Front, as have been experienced in California Forests and some National Parks. The implementation of a reservation system has resolved some of their problems.

The recommendation, as a result of this study, is to propose a trial reservation system for the individual family units in one-half of the Spruces Campground. The other one-half would remain under first-come, first-served management. The two systems would be closely monitored for user satisfaction, site deterioration, cost effectiveness, and occurrence of vandalism and law enforcement incidents.

If such a system were implemented and the monitoring results favorable, campground reservation systems may have applicability near other urbanized areas within the region.

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